ABSTRACT

A system and method for determining the stray radiation condition of a projection system, is presented herein. The invention comprises providing a detector with a detector aperture coincident with the image plane of the projection system, and measuring of a reference parameter in accordance with the projection beam intensity. The invention also comprises measuring a stray radiation parameter of an image of an isolated feature, formed by the projection system, and calculating a coefficient representative of the stray radiation condition of the projection system based on the measured stray radiation parameter and the reference parameter. The extent of the detector aperture fits within the extent of a notional shape, which is defined by first scaling down the shape of the feature by the magnification factor of the projection system, and by subsequently displacing each line element constituting the edge of the scaled down shape, parallel to itself, over a distance of at least λ/NA in a direction perpendicular to that line element. The invention further comprises positioning the detector aperture within the image of the isolated feature.